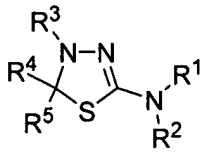
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A mitotic kinesin Eg5 inhibitor which comprises a thiadiazoline derivative represented by the general formula (I) or a pharmacologically acceptable salt thereof as an active ingredient:



(I)

<wherein R^1 represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group;

R^2 represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, $-C(=W)R^6$ [wherein W represents an oxygen atom or a sulfur atom, and R^6 represents a hydrogen atom, substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -NR^7R^8 (wherein R^7 and R^8 are the same or different and each represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R^7 and R^8 are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group), -OR^9 (wherein R^9 represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group) or -SR^{10} (wherein R^{10} has the same meaning as that of the aforementioned R^9)], -$NR^{11}R^{12}$ {wherein R^{11} and R^{12} are the same or different and each represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -$C(=O)R^{13}$ [wherein R^{13} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a

substituted or unsubstituted heterocyclic group, $-NR^{14}R^{15}$ (wherein R^{14} and R^{15} are the same or different and each represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R^{14} and R^{15} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group), $-OR^{16}$ (wherein R^{16} has the same meaning as that of the aforementioned R^9), or $-SR^{17}$ (wherein R^{17} has the same meaning as that of the aforementioned R^9)], or

R^{11} and R^{12} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group}, or $-SO_2R^{18}$ (wherein R^{18} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or

R^1 and R^2 are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group,

R^3 represents a hydrogen atom, or $-C(=Z)R^{19}$ [wherein Z represents an oxygen atom or a sulfur atom, and R^{19} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or

unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group,

$-NR^{20}R^{21}$ (wherein R^{20} and R^{21} are the same or different and each represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R^{20} and R^{21} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group),

$-OR^{22}$ (wherein R^{22} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or

$-SR^{23}$ (wherein R^{23} has the same meaning as that of the aforementioned R^{22})],

R^4 represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, and

R^5 represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or

R^4 and R^5 are combined together to represent -$(CR^{25A}R^{25B})_{m1}Q(CR^{25C}R^{25D})_{m2}$- {wherein Q represents a single bond, substituted or unsubstituted phenylene or cycloalkylene, m1 and m2 are the same or different and each represents an integer of from 0 to 4, with the proviso that m1 and m2 are not 0 at the same time, R^{25A}, R^{25B}, R^{25C} and R^{25D} are the same or different and each represents a hydrogen atom, halogen, substituted or unsubstituted lower alkyl, -OR^{26} [wherein R^{26} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -$CONR^{27}R^{28}$ (wherein R^{27} and R^{28} are the same or different and each represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group, or R^{27} and R^{28} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group), -$SO_2NR^{29}R^{30}$ (wherein R^{29} and R^{30} have the same meanings as those of the aforementioned R^{27} and R^{28}, respectively), or -COR^{31} (wherein R^{31} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted

or unsubstituted heterocyclic group)], -$NR^{32}R^{33}$ [wherein R^{32} and R^{33} are the same or different and each represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, -COR^{34} (wherein R^{34} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted lower alkoxy, substituted or unsubstituted aryloxy, amino, substituted or unsubstituted lower alkylamino, substituted or unsubstituted di-(lower alkyl)amino, or substituted or unsubstituted arylamino), or -SO_2R^{35} (wherein R^{35} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group)], or -$COOR^{36}$ (wherein R^{36} represents a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or R^{25A} and R^{25B}, or R^{25C} and R^{25D} are combined together to represent an oxygen atom, and when m1 or m2 is an integer of 2 or above, any of R^{25A}, R^{25B}, R^{25C} and R^{25D} may

be the same or different, and any two of R^{25A}, R^{25B}, R^{25C} and R^{25D} which are bound to the adjacent two carbon atoms may be combined to form a bond}>.

2. (Original) The mitotic kinesin Eg5 inhibitor according to claim 1, wherein R^2 is -C(=W)R^6 (wherein W and R^6 have the same meanings as those mentioned above, respectively).

3. (Original) The mitotic kinesin Eg5 inhibitor according to claim 2, wherein R^6 is substituted or unsubstituted lower alkyl.

4. (Currently Amended) The mitotic kinesin Eg5 inhibitor according to claim 1 ~~any one of claims 1 to 3~~, wherein R^3 is -C(=Z)R^{19} (wherein Z and R^{19} have the same meanings as those mentioned above, respectively).

5. (Original) The mitotic kinesin Eg5 inhibitor according to claim 4, wherein R^{19} is substituted or unsubstituted lower alkyl.

6. (Currently Amended) The mitotic kinesin Eg5 inhibitor according to claim 1 ~~any one of claims 1 to 5~~, wherein R^5 is substituted or unsubstituted aryl, or a substituted or unsubstituted aromatic heterocyclic group.

7. (Currently Amended) The mitotic kinesin Eg5 inhibitor according to claim 1 ~~any one of claims 1 to 5~~, wherein R^5 is substituted or unsubstituted aryl.

8. (Currently Amended) The mitotic kinesin Eg5 inhibitor according to claim 1 ~~any one of claims 1 to 7~~, wherein R^4 is substituted or unsubstituted lower alkyl, or $-(CH_2)_nNHSO_2R^{24}$ (wherein n represents 1 or 2, and R^{24} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, amino, lower alkylamino, or di-(lower alkyl)amino).

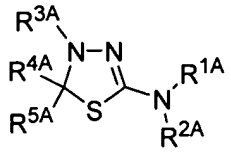
9. (Currently Amended) The mitotic kinesin Eg5 inhibitor according to claim 1 ~~any one of claims 1 to 5~~, wherein R^4 and R^5 are combined together to represent $-(CR^{25A}R^{25B})_{m1}Q(CR^{25C}R^{25D})_{m2}-$ (wherein R^{25A}, R^{25B}, R^{25C}, R^{25D}, m1, m2 and Q have the same meanings as those mentioned above, respectively).

10. (Original) The mitotic kinesin Eg5 inhibitor according to claim 9, wherein Q is substituted or unsubstituted phenylene.

11. (Currently Amended) The mitotic kinesin Eg5 inhibitor according to claim 1 ~~any one of claims 1 to 10~~, wherein R^1 is a hydrogen atom.

12. (Currently Amended) The mitotic kinesin Eg5 inhibitor according to claim 1 ~~any one of claims 1 to 11~~, wherein W and Z are oxygen atoms.

13. (Original) A thiadiazoline derivative represented by the general formula (IA) or a pharmacologically acceptable salt thereof:



(IA)

<wherein R^{1A} represents a hydrogen atom,

R^{2A} represents a hydrogen atom or $-COR^{6A}$ (wherein R^{6A} represents substituted or unsubstituted lower alkyl), or R^{1A} and R^{2A} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group,

R^{3A} represents $-COR^{19A}$ (wherein R^{19A} represents substituted or unsubstituted lower alkyl),

R^{4A} represents $-(CH_2)_pNR^{4AA}R^{4AB}$ [wherein p represents 1 or 2, and R^{4AA} and R^{4AB} are the same or different and each represents a hydrogen atom, lower alkyl or cycloalkyl (with the proviso that when R^{2A} is $-COR^{6A}$, R^{6A} and R^{19A} are tert-butyl and R^{5A} is phenyl, R^{4AA} and R^{4AB} are not methyl at the same time)], $-(CH_2)_pNR^{4AD}COR^{4AC}$ (wherein p has the same meaning as that mentioned above, R^{4AC} represents a hydrogen atom, lower alkyl or lower alkoxy, and R^{4AD} represents a hydrogen atom or lower alkyl), or $-(CH_2)_pNHSO_2R^{24A}$ {wherein p has the same meaning as that mentioned

above, R^{24A} represents $-(CH_2)_qNR^{24AA}R^{24AB}$ [wherein q represents an integer of from 0 to 5, and

R^{24AA} and R^{24AB} are the same or different and each represents a hydrogen atom, substituted or unsubstituted lower alkyl or cycloalkyl (with the proviso that when R^{2A} is $-COR^{6A}$, R^{6A} is tert-butyl and R^{19A} is methyl or tert-butyl, neither of R^{24AA} and R^{24AB} is methyl, and if one of R^{24AA} and R^{24AB} is a hydrogen atom in this case, the other is not ethyl or hydroxyethyl)], 3-chloropropyl, 3-azidopropyl or lower alkenyl (with the proviso that when R^{2A} is $-COR^{6A}$, R^{6A} is tert-butyl and R^{19A} is methyl or tert-butyl, R^{24A} is not vinyl)}, and

R^{5A} represents substituted or unsubstituted aryl or a substituted or unsubstituted aromatic heterocyclic group>.

14. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{5A} is substituted or unsubstituted aryl.

15. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{5A} is phenyl.

16. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 15~~, wherein R^{2A} is COR^{6A}, and R^{6A} is unsubstituted lower alkyl.

17. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 15~~, wherein R^{2A} is COR^{6A}, and R^{6A} is tert-butyl.

18. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 17~~, wherein R^{19A} is unsubstituted lower alkyl.

19. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 17~~, wherein R^{19A} is tert-butyl.

20. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 19~~, wherein R^{4A} is $-(CH_2)_pNR^{4AA}R^{4AB}$ (wherein p, R^{4AA} and R^{4AB} have the same meanings as those mentioned above, respectively).

21. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 19~~, wherein R^{4A} is $-(CH_2)_pNR^{4AD}COR^{4AC}$ (wherein p, R^{4AC} and R^{4AD} have the same meanings as those mentioned above, respectively).

22. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 19~~, wherein R^{4A} is $-(CH_2)_pNHSO_2R^{24A}$ (wherein p and R^{24A} have the same meanings as those mentioned above, respectively).

23. (Currently Amended) A medicament which comprises the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 22~~ as an active ingredient.

24. (Currently Amended) A mitotic kinesin Eg5 inhibitor which comprises the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 22~~ as an active ingredient.

25 (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 12~~.

26. (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 22~~.

27. (Currently Amended) Use of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 1 ~~any one of claims 1 to 12~~ for the manufacture of a mitotic kinesin Eg5 inhibitor.

28. (Currently Amended) Use of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 ~~any one of claims 13 to 22~~ for the manufacture of a mitotic kinesin Eg5 inhibitor.